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ABSTRACT

A survey of 121 rural teachers in British Columbia examined their knowledge about and attitudes toward the inclusion of special needs students. In addition, the study examined rural teachers' knowledge of and ability to access resources in the school district and their individual schools. The survey questionnaire consisted of 114 questions related to present employment and personal data, teachers' definitions of students with special needs, the adequacy of preservice and inservice training as preparation for inclusion, available support services, identification and assessment, effective teaching strategies, and planning and adjustment. The majority of respondents perceived that their inservice and preservice education did not adequately prepare them for the realities of inclusion. In addition, teachers cited a high percentage of children with special needs in their classrooms, a wide range of disabilities among special need students, a grave concern regarding the lack of support services, and a perceived inability to provide optimal educational programs. Repeatedly the teachers reported the implementation of various individualized learning experiences. Recommendations for improving the process of inclusion include ensuring adequate administrative and personnel support; providing inservice education to furnish teachers with resources and materials to use with special needs students; giving rural teachers opportunities for team planning and team teaching; sharing of teaching and learning strategies across grade levels; promoting community support; and promoting a networking system among rural communities. Contains 23 references and 11 data tables. (Author/LP)

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CONTRIBUTED PAPERS

THE IMPACT OF SPECIAL NEEDS STUDENTS ON TEACHERS IN THE RURAL AREAS OF BRITISH COLUMBIA

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ABSTRACT

Teachers ... lack information concerning the range of special needs, and are often unaware of appropriate teaching techniques, and suitably adapted curriculum materials ... (B.C.T.F., Partnerships for Inclusion, 1992)

The philosophical and practical difficulties of including children with special needs into regular classrooms has become a worldwide phenomenon. In order to make adequate provisions for rural schools and develop relevant teacher education programs, this study was conducted to measure knowledge, attitude towards, and a willingness to learn about children with special needs.

The study found that the majority of rural teachers in British Columbia perceived that both their in-service and pre-service education had inadequately prepared them for the realities of inclusion. The teachers cited a high percentage of children with special needs in their classrooms, a wide range of disabilities, a grave concern regarding the lack of support services, and a perceived inability to provide optimal educational programs. Repeatedly the teachers reported the implementation of a variety of individualized learning experiences. The study provides several recommendations for teacher education.

INTRODUCTION

Provincial policies have been developed to mandate inclusion which cause pedagogical and organizational problems for school personnel... Teachers are uncertain of how to teach 'special needs' students. They lack information concerning the range of special needs, are often unaware of appropriate teaching techniques ... (B.C.Teachers' Federation, 1992)

The philosophical and practical difficulties of including children with special needs in regular classrooms has become a worldwide phenomenon. Two Canadian studies note that classroom teachers lack the confidence to develop appropriate individualized programs and believe they need more knowledge regarding inclusionary practices (B.C. Teachers' Federation, 1992, Greater Victoria Primary Teachers' Association, 1991). Both these surveys

explicitly identified inservice needs and the necessity for more extensive collaboration with concerned professionals. Extensive research indicates that although teachers express feelings of inadequacy about teaching students with disabilities they respond positively to inservice programming (Simpson & Myles,1990; Thompson, 1992; Zeph, 1991).

A question arising from the strongly corroborated need for inservice programming is the content of this professional development. Themes which resound throughout the literature (Cross & Frankcombe, 1994; DePaepe & Walega, 1990; Ellis & Graves, 1990; Lewis & Doorlag, 1991; Thompson, 1992; Zeph, 1991) are the need for instructional models, individual educational plans, specific classroom modifications, information processing and cognitive strategies, an improved teaching environment, accessing support services within the school district, and educational cooperation between districts.

In British Columbia the process of delivering professional development is complicated by the rural nature of the province. The population centres are clustered in the Lower Mainland region, southern Vancouver Island and the Okanagan Valley. The rural areas are generally characterized by mountainous terrain and climatic extremes. The problem of access to these rural schools becomes even more critical when inclusion of all pupils in schools is mandatory. *The British Columbia Royal Commission on Education: Summary Report* (1988) has addressed the issue of rural inequality in education, noting that many small schools in remote areas of the province "are located in relative isolation and operate with less than generous resources; and many students, teachers, parents, administrators, and trustees admit a sense of abandonment by central educational authorities" (1988, p. 16).

When discussing the issues of rural schools the term "rural" is examined in at least three different ways according to Bealer, Willits & Kuvelski, 1965:

1. ecological - relating to place of residence with particular attention to population size, density and degree of isolation.
2. occupational – farming versus other occupations.
3. sociocultural – differentiating between attitudes and behaviour in rural and urban communities.

For the purpose of defining rural in B.C. and within this paper distance and degree of isolation are predominant features which must be considered.

The issue of integrating children with special needs into these rural classrooms is of vital import to the preservice and beginning teacher as the majority of students who graduate and receive a Bachelor of Education degree at the three British Columbia universities will begin their teaching careers in small rural schools (Bandy & Boyer, 1994). Therefore, in order to develop relevant teacher education programs, it is important to understand the attitudes, concerns and knowledge of rural teachers toward the inclusion of children with special needs in their classroom (Boyer & Bandy, 1993).

Purpose of the study

The purpose of the study was to survey teachers in rural school districts to determine their knowledge and attitude towards the inclusion of children with special needs in their classrooms. Secondly, the study identified rural teachers' knowledge of and ability to access resources in the school district and their individual schools. The questions addressed in the study include:

1. How do B.C. teachers, in rural schools, define students with special needs?
2. What training have rural teachers received at both the preservice and inservice level to prepare them to teach students with special needs?
3. How do teachers in rural B.C. perceive their effectiveness when integrating students with special needs?
4. Do gender, grade level, or size of community make a difference to the level of satisfaction that teachers experience in their integration of special needs students?
5. What support is available to assist the classroom teacher when integrating special needs students into their rural school?
6. How do rural teachers assess the progress of special needs students in the regular classroom?
7. Which resources and personnel have assisted the teachers the most with the inclusion of special needs students?
8. What teaching strategies do teachers find the most effective for integrating special needs students?
9. What recommendations could be made to rural school districts, the Ministry of Education, and Universities regarding the integration of students with special needs in rural schools?

The study sample

The sample for this study was mainly drawn from teachers currently employed in 29 districts classified by the Ministry of Education as rural/remote. For the most part the sample was drawn from schools with staffs of between two and nine teachers. In a few cases, the sample came from other school districts where there were communities that were relatively remote within the district. The sample included 178 schools in 43 school districts. Questionnaires were distributed to one, two or three teachers within each school depending upon the size of the school. A total of 337 questionnaires were distributed and 121 or 36%, returned completed questionnaires.

Instrumentation

The survey questionnaire was designed with 114 questions segmented into five parts: Present Employment and Personal Data, Students with Special Needs and the Degree of Preservice/Inservice Training, Support Services, Identification and Assessment, and Planning and Adjustment. The instrument was designed to incorporate the priorities identified by a pilot group of rural teachers and student teachers. The questionnaire was mailed to the identified teachers.

Data analysis. All numeric data were transcribed to a computer spreadsheet for analysis. Frequency distributions and percentages were computed. Given the nature of the numeric data, only chi-square tests of statistical significance were used to further explore the data. In some cases the ordinal scale was treated as interval data with calculated means used for the purpose of rank ordering results.

The open-ended responses of all participants were collated and have been used to illuminate the numeric data..

Concern for Ethics. All participants were informed of the purposes of the survey. Participation was voluntary, all responses were anonymous, and no person has been identified by name in the report.

FINDINGS

There were 121 respondents who returned completed questionnaires. Remarks by the respondents showed they were extremely interested in participating in the study and the majority asked to receive a copy of the findings.

Profile of the study group

A profile of the respondents is displayed in Table 1. Of the participants 76% were female and 24% male. Table 1 shows the distribution broken down into primary and intermediate/secondary teachers with only two men at the primary level. The ages of the respondents ranged from less than 25 years to over 53 years with a median age of 40 years. Teachers were asked how long they had been in the school district and in the school. Twenty three percent of the teachers had been in the district for less than 3 years and 34% had been in the school for less than 3 years. Table 1 denotes the average stay in the district was 8 years and the average number of years in their present

school was 5 - 6 years. These results show that currently there is a relatively stable teaching population in the rural schools of British Columbia.

Table 1: Profile of the sample

Item	Primary	Intermediate/ Secondary
Distribution by gender	66 women 2 men	26 women 27 men
Average age	41.5 years	40 years
Number of years employed in district	7.7 years	8.0 years
Number of years in school	5.1 years	5.9 years
Teaching certificate		
Standard	18	2
Professional	50	51
Location of school		
Isolated	5	1
Native village	4	4
Community less than 500	36	15
Community less than 1000	9	15
Community less than 5000	14	18
Class Size (average)	18 children	22 children
Number of Special Needs in class) (average	3 special needs	4 special needs

Eighty three percent of the respondents held University degrees and a B.C. Professional Teaching Certificate. The average class size was 18 students in primary grades and 22 students in the other grades. The number of students with special needs ranged from 1 to 10 with an average of 3 - 4 special needs students in a class. Seventy of the respondents were teaching in communities with a population of less than 500.

Research Question one: How do B.C. teachers, in rural schools, define students with special needs?

Respondents were asked for their definition of students with special needs. Table 2 displays the definitions supplied by the teachers. Definitions used by 39 teachers were grouped as 'students who are outside the normal range , they need lots of support, curriculum modifications, and special facilities, human resources involved'. The second most common grouping, 19 teachers, was 'students who are physically, socially, culturally, ethnically, educationally, intellectually below age level,. The various definitions of students with special needs as stated by the teachers were fairly consistent and similar to the guidelines offered by the Ministry of Education. There were some definitions that acknowledged "gifted" as special needs – *A child who is far below or above(2/3 + yrs) where most kids would be – and again – differently abled, talented/gifted or physical, mentally unable to function*. Many definitions included comments about inappropriate behaviour. Some added comments further illustrate the teachers' understanding and attitude toward special needs students. One teacher discussed the issue of enabling the other students in the classroom. "a student with special needs is one who needs continuous support (so that) the other students (are able) to progress in a classroom situation".

Many teachers mentioned behaviour problems as well as other special needs.

Table 2: Rural Teachers' Definitions of Children with Special Needs

Definition categories	n =115
Students who are outside the normal range , they need lots of support, curriculum modifications, and special facilities, human resources involved.	39
Students who are physically, socially, culturally, ethnically, educationally, intellectually below age level.	19
A child who is far below or above(2/3 + yrs) where most kids would be	11
Children who need extras in academics (Learning disabled.), modifying disruptive/inappropriate behaviour, physical (hearing, vision)	7
Students who are unable to learn (read/math/think/problem solve) or behave socially at normal level	6
I.E.P. , one on one help, or group of 2 or 3 children with similar needs	5
Needing individual or specialized assistance beyond the expertise or time allotment of regular teacher	5
Differently abled, talented/gifted or physical, mentally unable to function	4
Learning Disabled. (visual/audio, perceptual problem.), motor deficit, ADHDH, behaviour problems, lacks school experience.	4
Learning is severely delayed -Mild mental handicap	3
Extra encouragement, time on behaviour plan, teacher effort to become a responsible class member	3
Physically/mentally unable to handle routines or directions without help	2
Hyperactivity and Fetal Alcohol Syndrome	2
Conspicuous among peers in physical or social skills	2
Emotional problems due to dysfunctional families	1
Dysfunctional, Fetal Alcohol Syndrome, hyperactivity-emotional problems, lack of food	1

One teacher defined a student with special needs as: "someone who has behaviour problems or who is physically handicapped in such a way that it is not easy for him to learn in a regular classroom" while another teacher said, "a child with severe behaviour problems....."

The definitions reveal that the rural teachers are faced with a large diversity of special needs in their classrooms.

Research Question two: What training have rural teachers received both preservice and inservice to prepare them to teach students with special needs?

Teachers were asked to rate on a five point Likert scale their opinion of the adequacy of their preservice and inservice training in preparation for inclusion of various categories of special needs. Mean scores were used to rank order the preservice and inservice components. The mean ratings listed in Table 3 reveal that rural teachers believed that both the preservice and inservice training for all categories were marginal at best. Teachers perceived that they had received slightly more preservice and inservice training for Reading Difficulties (mean 3.16 & 2.97) than for any other type of special needs. Also, teachers perceived that they had received the least preservice and inservice training about working with Tourettes Syndrome. In fact more than 86% of the respondents felt they had inadequate training both preservice and inservice for Tourettes Syndrome and Autism. One area, identified by teachers in their definitions, of particular concern was severe behaviour problems. Yet the teachers felt that the preservice and inservice they received to work with these students was between marginal and inadequate (mean 3.52 & 3.27). Fetal Alcohol syndrome was also identified as a reality in many rural schools. Again the teachers indicated that, in their opinion they had received inadequate training (mean 4.24 & 3.95) about Fetal Alcohol syndrome and effects.

Table 3: Perceived Adequacy of Preservice and Inservice training received by Teachers in Rural Areas in Preparing them to work with various categories of Special Needs

(1 Excellent, 2 Adequate, 3 Marginal, 4 Inadequate, 5 not at all)

Item Rating (1.....5)	Preservice training Mean	Rank Order	Inservice training Mean	Rank Order
Reading Difficulties	3.16	1	2.97	1
Behaviour Disorders	3.52	3	3.27	2
Gifted	3.18	2	3.37	3
Children at Risk	3.59	4	3.41	4
Children with severe Learning Disabilities	3.95	5	3.62	5
Fetal Alcohol Syndrome	4.24	9	3.95	6
Mental Handicaps (TMH)	4.12	7	4.16	7

Hearing Impairments	4.27	11	4.24	8
Physical Handicaps	4.03	6	4.26	9
Visual Impaired	4.26	10	4.26	10
Mental Handicaps (EMH)	4.18	8	4.28	11
Petit Mal/Grand Mal	4.30	13	4.31	12
Chronic Health Impairments	4.28	12	4.40	13
Autism	4.49	14	4.50	14
Tourettes Syndrome	4.64	15	4.61	15

According to these respondents the majority of programs did not adequately address the specific issues of the different types of special needs that teachers might encounter.

Another series of questions asked respondents to indicate on a five point scale whether they agreed or disagreed with statements about the types of preservice and inservice training they received. Table 4 tabulates the responses by percentages. Teachers expressed no consistent responses as to whether their preservice and inservice sessions contained a "grab bag" of hands-on activities. 43% of the teachers agreed that any preservice training that they had received was predominantly theoretical, whereas only 27% perceived that their inservice was mainly theoretical. Inservice programs included both theoretical and practical information regarding special needs students according to 35% of the teachers while 34% disagreed. More teachers perceived that their inservice had introduced them to a variety of materials (34%) than had their preservice (8%). The vast majority of respondents believed that neither their preservice (76%) nor their inservice (42%) had introduced them to a variety of materials.

Further information in Table 4 reveals that teachers believed that they had received little or no instruction in curriculum and methodology for individual educational planning during their preservice education (62%). Fifty percent of the respondents felt that they need more inservice on *instruction in curriculum and methodology for individual educational planning*. Fifty two percent of the respondents had received inservice for working with special needs students less than once a year and only 21% received inservice twice a year.

Table 4: Type of preservice and Inservice received by Teachers working in Rural Schools

Item		Strongly agree %		Neutral		Strongly disagree %
I received a "grab bag" of hands-on strategies for working with Students with Special Needs	Preservice	4.7	16.8	27.1	23.4	28
	Inservice	6.7	28.6	25.7	21.9	17.1
I predominantly received theoretical information regarding Students with Special Needs	Preservice	14.8*	28.7*	22.2	14.8	19.4
	Inservice	6.5	20.6	31.8	29.0	12.1
I received a both theoretical and practical information on Students with Special Needs	Preservice	2.8	16.8	19.6	31.8	29
	Inservice	2.8	32.7*	29.9	20.6	14
I was introduced to a variety of materials and activities to work with Students with Special Needs	Preservice	1.9	6.5	15.7	29.6	46.3
	Inservice	4.7	29	24.3	25.2	16.8
I need more instruction in curriculum and methodology for IEP's	Preservice	49.1*	23.1	19.4	2.8	5.6
	Inservice	44.2*	28.8	21.2	3.8	1.9
I received instruction in curriculum and methodology for IEP's	Preservice	7.3	13.8	16.5	26.6	35.8
I receive in-service at least twice a year for working with Students with Special Needs	Inservice	9.3	12.1	10.3	15.9	52.3
I receive in-service less than once a year for working with Students with Special Needs	Inservice	31.8	20.6	12.1	14	21.5

* *indicates the highest percentages.*

The general adaptability and inventiveness of rural teachers may account for several respondents mentioning that they tend to augment their training with their own study and reading. One respondent stated that what she knows about children with special needs is "from Pro-D and workshops and the extra reading I did after University". Another respondent stated "I have done reading on my own and figured out how to adapt my program, but I feel quite isolated".

Research Question three: How do teachers in rural B.C. perceive their effectiveness when integrating students with special needs?

Respondents were asked to rate, on a five point Likert-type scale, their success in meeting parental expectations and the needs of exceptional children. For the purpose of this report the categories have been condensed to three categories: (1)*Excellent and very good*, (2) *Good*, and (3) *Moderate and Poor*.

Table 5: Teachers' Perceived Success at Integration and Meeting the Needs of Special Needs children

Item	Excellent/ v.good %	Good	Moderate/ Poor %
Academic needs	24.5	23.6	51.9
Social needs	34.9	31.1	33.9
Emotional needs	33.0	32.1	34.9
Parental expectations	34.0	28.3	37.7
Benefits for Special Needs child	30.4	27.6	41.9
Benefits for the rest of the class	18.1	26.7	55.3

While 34.9% of the respondents felt that they had met the social needs of the special needs students only 24.5% felt they had met the academic needs. Only 18.1% of the teachers perceived that the integration of special needs students into the regular classroom benefitted the rest of the class. One third of the teachers believed they were meeting the parental expectations for the special needs students and that these children did benefit from integration into the classroom (30.4%).

Respondents were asked to rate their level of satisfaction with their ability to effectively integrate special needs children into their class as *Very high, High, Moderately High, Low* and *Very Low*. Only 18% of the teachers were satisfied with their inclusionary practices whereas 43% were very dissatisfied with their ability to effectively integrate the students. As might be expected, upon further analysis it appeared that there was a correlation between the teachers success in meeting the needs of the students and their own level of satisfaction. Because of the small numbers the correlation could not be considered statistically significant. However, each factor provided a higher level of satisfaction for those who perceived they were meeting the needs of the special student successfully compared with those who felt unsuccessful.

The teachers provided further comments that illustrated their feelings graphically. One teacher stated that "I never feel that I am doing enough for those students" and he perceived that he was only meeting their needs at a moderate level. Three other teachers whose level of satisfaction was low stated: "too many children; not enough support in the classroom" ; " for 2 years I had a student with apraxia who was incapable of doing academic work. I feel my attempts at formulating an alternative program were inadequate"; and "the students as well as I get frustrated because their needs are not being met". One teacher who perceived he was meeting the needs of the children and had a very high level of satisfaction explained that the "involvement of all stakeholders - parents, District, School and students. Reasonable expectations for growth & success" was the key to success.

Research Question four: Do gender, size of class, grade level, or size of community make a difference to the level of satisfaction that teachers experience in their integration of special needs students?

Table 6: Teacher level of satisfaction and factors that make a difference

Factor		High satisfaction %	Moderate satisfaction %	Low satisfaction %	p
Gender	male	18.5	18.5	63	.027*
	female	16.9	46.1	37.1	
Class size	<21	23.1	42.3	34.6	.165
	>21	12.5	37.5	50	
Grade level –	primary	27.4	32.3	40.3	.012*
	intermediate	6.0	46.0	48.0	
Community size–					
	isolated	19.29	35.08	47/36	.768
	>500	16.36	45.45	38.18	
Teacher assistant –					
	available	25.33	44.0	30.66	.016*
	seldom available	0	42/86	57.14	

The data provided by the previous questions were further studied with Chi-square analysis. Table 6 shows the analyses. There were statistically significant differences in level of satisfaction for three factors; gender, grade level and the availability of a teaching assistant. Gender did make a difference. 63% of the men expressed a low level of satisfaction with their ability to integrate special needs students whereas only 37.1% of the females expressed a low level of satisfaction. This result might be partially explained by the fact that only two men were teaching the primary grades and grade level also made a difference in level of satisfaction. While 27.4% of the primary teachers claimed a high level of satisfaction only 6% of the teachers of other grades were satisfied with their ability to effectively integrate special needs students. Perhaps at the primary level the social and emotional needs outweigh the academic needs and therefore the ability to integrate children into the classroom is more satisfying.

Research Question five: What support is there available to assist the classroom teacher integrate special needs students into their rural school?

Respondents were asked to state how often they had the assistance of support personnel in their classrooms. The categories for the five point scale were *Daily, Regularly, Sometimes, Seldom, Never*. For the purposes of reporting the categories were collapsed into (1) *Daily*, (2) *Regularly* and *Sometimes*, and, (3)*Seldom* and *Never*. The results are outlined in Table 7 as frequency distributions by percentages.

Teacher assistants were available to more than half the teachers on a daily basis. However, the respondents were not asked to relate whether the assistants were full or part time. A few teachers mentioned that when teacher assistants were available they were untrained members of the community. One factor that was considered most important by the rural teachers and student teachers in the study conducted by Boyer & Bandy (1993) was that full time teacher assistants should be available for "low incident" special needs students. Unfortunately, the present study did not address this issue. As might be expected a nurse, school psychologist, speech and language pathologist, and physiotherapist were not available on a daily basis in the rural schools. Over 50% of the teachers stated that these support personnel were *seldom* or *never* available to them, the only exception was the speech and language pathologist.

Table 7: Support Personnel Available to the Rural Teachers

Availability of Support Personnel	Daily %	Regularly/ Sometimes %	Seldom/ Never %
Teacher assistant	53.4	28	18.2
Nurse	0	31.0	64.5
School psychologist	0	34.2	65.9
Speech and language pathologist	0	58.0	42.0
Physiotherapist	0	22.5	77.5
Child and youth care workers	2.6	33.1	63.2
Home/school coordinator	5.4	23.2	71.5
Learning assistance teacher	24.4	53.8	21.8
Parent volunteers	3.4	39.3	57.2
Community volunteers	0	18.4	81.6

A learning assistance teacher was available daily or regularly for 78% of the teachers though 21.8% seldom or never had a learning assistance teacher in their school. Also, the majority of teachers seldom or never had child and youth care workers (63.2%) or home/school coordinators (71.5%) to support them.

One surprising result was the relatively few parent or community volunteers who were working in classrooms daily (3.4% and 0%). Forty six teachers did have parent volunteers in their classrooms regularly or sometimes. A low percentage of teachers had community volunteers in the classroom (18.4%) sometimes while 81.6% seldom or never had them in their classrooms. A rural school is usually such an integral part of the community that it might be expected that many volunteers would be working on an individual basis with the special needs children.

These results illustrate the low level of support personnel that are available to rural teachers in British Columbia. Funding is an issue, particularly in small schools where the enrolment is low. The teachers' frustrations can be easily understood when it is realized that these rural teachers are often without support from other professionals for their inclusionary efforts.

A District resource team was available in 73.7 % of the schools while a school based resource team was available in 70.2 % of the schools.

The composition of the personnel that comprised the teams varied. In several cases the school based team included the principal or vice-principal, the teacher, the learning assistance teacher and the teacher assistant. However, forty nine teachers stated there was no learning assistant regularly in the school and forty teachers indicated they only sometimes or never had teacher assistants in the classroom. For these teachers the school based team did not existent.

Respondents were asked to rank order the importance of six different responsibilities of the district and school based resource teams. Table 8 lists the responsibilities for each of the teams and the average rank ordering of the responsibilities. Ninety respondents completed the rank ordering for the district team and ninety three for the school based team.

Teachers perceived that the most important responsibility for both district and school based teams was to *"assist the teacher in establishing the most enabling environment for learning."* For the district team the second most important responsibility was to *"make suggestions to modify and adapt teaching style, activities and curriculum for individual pupils"* while for the school based team the second most important responsibility was to *"provide recommendations for improving pupil's instructional program"*.

Table 8: Teacher Perceptions of the Importance of Certain Responsibilities of Resource Teams

Responsibilities	District Team mean ranking n=90		School Team mean ranking n=93	
To assist the teacher in establishing the most enabling environment for learning	2.61	1	1.90	1
To make suggestions to modify and adapt teaching style, activities and curriculum for individual pupils	3.09	3	2.79	2
To provide recommendations for improving pupil's instructional program	2.80	2	2.81	3

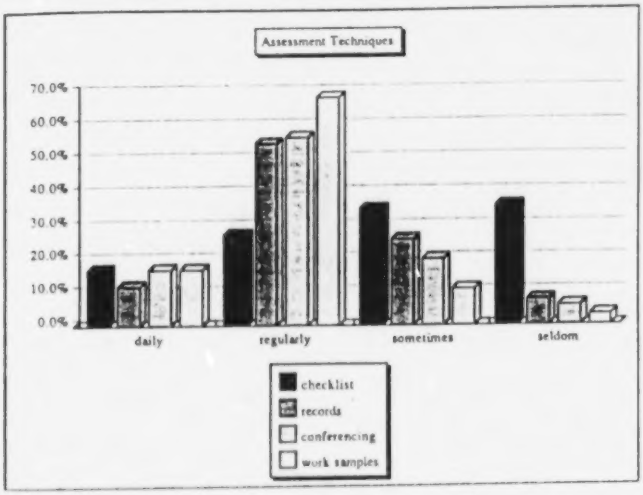
To suggest innovative strategies for the varied learning styles of children in the classroom	3.36	5	3.21	4
To develop a repertoire of conflict management strategies to improve pupil interaction with adults and peers	3.99	6	3.60	5
To help integrate related services speech, physiotherapy, occupational therapy	3.22	4	4.42	6

The teachers believed that the least important responsibility for the district team was *"to develop a repertoire of conflict management strategies to improve pupil interaction with adults and peers"* and for the school based team was to *"help integrate related services, speech, physiotherapy, occupational therapy"*.

On the whole teachers did not rank highly the development of a repertoire of conflict management strategies. Perhaps they distinguished between the in-class aspects of integration and the needs of the individual learner.

Question six: How do rural teachers assess the progress of special needs students in the regular classroom?

Figure 1. Techniques employed by rural teachers to assess the progress of exceptional children.



Respondents were given a list of four assessment techniques and were asked whether they used the techniques (1) *daily*, (2) *regularly*, (3) *sometimes*, and (4) *seldom*. They were also asked to outline other techniques that they used regularly. Figure 1 displays the results.

Of the total number of respondents 1.7% indicated a daily use of checklists and 35.9% indicated that they *seldom* employed developmental checklists to assess individual student progress. Twelve percent indicated *daily use* of observation and routine record keeping while 54.6% employed these techniques *regularly* and 26.1% *sometimes*. Conferences were cited by 16.8% as being a *daily* occurrence while 56.5% of the respondents cited classroom activity as an assessment tool used with regularity. Samples of student work were employed by 16.7% of the respondents on a *daily* basis while 68.3% regularly assessed student progress employing student work samples. The rural teachers profess the regular use of a variety of assessment strategies while closely monitoring the progress of the special needs pupils in their classes.

Research Question seven: Which resources and personnel have assisted the teachers the most with the inclusion of special needs students?

Respondents were provided with thirteen statements with which they were asked to *strongly agree, agree, neutral, disagree and strongly disagree*. For purposes of analysis the five point scale was collapsed to three categories: (1) *strongly agree and agree*, (2) *neutral*, (3) *disagree and strongly disagree*. Table 10 displays the responses by percentage distribution, means and rank ordering. Teachers strongly agreed with the statement that *"Other teachers have provided me with learning materials and resources to assist in planning for individual student needs"*. The statement with which the teachers agreed the second most often was *"Other professionals have provided me with learning materials and resources to assist in planning for individual student needs"*. The third ranking was given to the statement *"My colleagues have modeled appropriate teaching strategies"*. The lowest ranking was given to both statements about University/College instructors and resources, assisting the teachers with background knowledge and materials.

Table 9: The Resources that Teachers Identify as Available to Them for the Implementation of Integration in Their Classrooms

Item	Strongly agree/ agree %	Neutral	Disagree Strongly/ Disagree %	Mean	Rank Order
Other teachers have provided me with learning materials and resources to assist in planning for individual student needs	62.3	21.1	15.6	2.46	1
Other professionals have provided me with learning materials and resources to assist in planning for individual student needs	54.1	27.5	18.3	2.59	2
My colleagues have modeled appropriate teaching strategies	42.9	29.9	27.1	2.87	3
My colleagues have provided guided supervision and support for me to learn new strategies	38.9	32.4	28.7	2.99	4
District Resource Centre has provided learning materials and resources to assist in planning for individual student needs	33.7	29.9	26.5	3.22	5
School Resource personnel have provided guided supervision and support for me to learn new strategies	24.3	38.3	37.4	3.24	6
Parent involvement has assisted me in successfully integrating Students with Special Needs	27.5	32.1	40.4	3.31	7
District Resource personnel have provided guided supervision and support for me to learn new strategies	22.0	28.4	49.5	3.48	8
The District has provided additional release time for me to observe teachers interacting with Students with Special Needs	16.7	22.2	61.1	3.89	9
The Ministry of Education has provided learning materials and resources to assist in planning for individual student needs	12.0	22.9	65.1	3.90	10

Community involvement has assisted me in successfully integrating Students with Special Needs	8.4	23.1	68.5	4.08	11
University /College instructors have provided me with background knowledge in assisting Students with Special Needs	22.9	25.7	51.4	4.18	12
University/College Resource Centre has provided learning materials and resources to assist in planning for individual student needs	4.6	11.1	84.2	4.43	13

To further understand which resources and personnel have assisted the rural teachers the most with their inclusionary efforts, respondents were asked to indicate the level of importance of ten items in helping them with their inclusionary practices. The scale used was five points with (1) great amount...(3) moderate amount ...(5) not at all. For purposes of comparing the level of importance the results are tabulated in Table 11 with means and rank order reported. Teachers perceived that the three most important items for them were:

(1) a supportive school administration.

(2) class size.

(3) a good working relationship with the parents of children with Special Needs.

It was noted earlier in this report that class size was one of the factors that made a significant difference in the level of satisfaction that teachers experienced with integrating special needs children in their classroom. Alexander & Bandy (1990) found that a supportive school administration was also a significant factor in the successful acclimatization of first year teachers into B.C. rural schools.

Table 10: Degree of Importance of Several Items that Teachers Perceive would Assist them with Integration

Item that would assist teacher	Mean	Rank order
Supportive school administration	1.56	1
Class size	1.60	2
A good working relationship with the parents of children with Special Needs	1.61	3
Appropriate modified curriculum materials for the classroom	1.99	4
District in-service	2.22	5
Use of technology to assist students with Special Needs	2.29	6
Resource documents that include examples of successful integration practices	2.52	7
Release time to working with the teacher assistant	2.54	8
Summer institutes	2.92	9
Release time to work with the pupil's previous teacher	3.31	10

It is worth noting that teachers perceived that a good working relationship with the parents of children with Special Needs was important to them and yet the majority previously reported that there were seldom parent volunteers in their classrooms.

High on the teachers' list of important items were "Appropriate modified curriculum materials for the classroom" and "District in-service". Both these items have been previously noted as responses to other questions.

The rural teachers perceived that the three least important items to assist them with inclusion were:

(1) Release time to work with the teacher assistant

(2) Summer institutes

(3) Release time to work with the pupil's previous teacher

However, the teachers rated all ten items as of great or moderate importance in assisting them.

Research Question eight: What teaching strategies do teachers find the most effective for integrating special needs students?

Respondents were asked to complete an open-ended question as to which teaching strategies they found effective when working with special needs pupils. Table 12 outlines the teaching strategies that teachers found the most effective when working with special needs children in their classrooms.

The comments from the teachers reveal that teachers in rural B.C. are using many exemplary strategies for working with Special Needs children. The large number of teachers that mentioned one-on-one instruction (30), good behaviour management/established routines/consistency (28), flexibility / innovation/ variety/ open ended activities/role playing/use of manipulatives / concrete experiences (26) are using stellar practices which successfully include students with special needs in their classrooms. However, the low level of satisfaction reported may result more from a lack of confidence than with their teaching ability. As noted in Table 12, teachers described a wide range of strategies from specific programs (Whole language, Distar, Reading Recovery, Phonics) to classroom management techniques (consistency, clear expectations, accurate assessment of needs).

Table 11: Teaching Strategies Perceived as Effective with Special Needs Students

Effective teaching strategies	n=99
Individual attention/ working one on one/attainable tasks	30
Good behaviour management/ established routines / consistency/behavior modification	28
Flexibility / innovation/ variety/ open ended activities/role playing /use of manipulatives / concrete experiences	26
Patience/make use of humour/ developing a positive helping attitude/ empowerment of student/draw on student's strengths/caring	24
Modification of class assignments and academic curriculum/ having choices/ more time/reteach basic lessons	21
Buddy reading/putting student with more able student/ peer coaching	21
Realistic expectations/ accurate assessment of needs and abilities/ objective based/accurate record of progress	20
Small groups/cooperative learning groups/ skills/multi age grouping	19
Structured environment/ lessons/optional strategies (discussion vs written tests) valuing oral work as well as written/quiet working area/ time out/separate work space	19
Fostering understanding and support/ build self esteem/ personal relationship/regularly praise and reward positive behaviour	18
Whole language/strategies for improving reading level/lots of oral work/use of a computer for student/ use of technology	15
Parental support that is realistic/parental involvement/home-school communication/ team planning including parents/work with support system	15
Assistant working with the student/ good rapport with T.A.	11
Speak slowly and firmly/ clear concise instructions/ repeat directions	7
Routine charts and bulletin boards/ visual aids/ tapings	6
Distar/ Reading recovery program/writing strategies/ writers workshop	6
Talking with class about special needs student/class discussions	6
Conflict resolution skills for behaviour/strategies	3

Other strategies included:

— make use of sharing time
— enlisting whole school in helping
— learn story telling

— try to use all modalities/ learning styles
— book with a tape for reading
— honesty – no hidden agendas
— problem solving team meeting
— visual cueing
— school based team going to inservice together
— teacher release time to work with student
— ask for help if you need it
— work with support system
— teach the thought processes
— School based team share responsibilities
— more time to complete assignments
— attention to all goal areas
— give warning of changes that may disrupt a routine
— training for paraprofessionals

The teachers commented on curriculum modifications that they believe are necessary such as modification of class assignments, open ended activities, use of manipulatives, reteaching basic lessons. The comments reflect an overwhelming feeling of caring teachers who want to build the students' self-esteem, and create a supportive environment for all the children in their class.

Teachers gave some further comments which illustrate the variety of situations in rural British Columbia:

> "I am a rural primary teacher with 11 native students and 1 non-native. 6 out of 12 of my students qualify for learning assistance and at least one requires professional counseling. Our school has no L.A. teacher. Our "teachers' assistants" are unqualified members of the community"

and again

> "Our school is a 2 hour drive away from the school board office – resources are not at our fingertips. Our community has no library resources of any kind. Fetal alcohol effects or syndrome is common in our student population – I have no training for these.

My students often have a non-literate background and some parents are illiterate. My techniques for helping the students all revolve around building relationship with them as individuals. I find that until I deal with self esteem and self discipline problems I cannot begin to tackle academic problems."

Another teacher reported on the effect that students with behaviour problems have on the rest of the class and the need for adequate funding:

> "I think normal kids get fed up waiting for behaviour problems to subside: A lot of learning time is lost because of dealing with 1 or 2 or more behaviour problems. Some kids see the "problem" as always getting the attention and may over time resent that child".
>
> There should be. "support for teachers (inservice) and materials all of which cost money. Post secondary training should focus more on strategies"

Only one teacher reported a definite negative attitude toward the inclusion of Special Needs children:

> "The best by far is special classrooms for:
>
> a) behaviour disturbed
>
> b) slow learners
>
> so that each group can be taught at a rate and approach suitable for them. Physically handicapped but otherwise capable students should be integrated into regular classes along with the aids they need to manage".

One teacher felt that the small rural schools often can provide a safe supportive environment necessary for Special Needs children more easily than a large urban school:

> "As our school is small, the staff works together with behaviour problems. We agree on consequences, discuss strategies, and all take a concerned part. Thus classroom and playground behaviours are monitored consistently."

Discussion and Recommendations

Within this paper we have examined the responses of rural teachers to the major question: How do you academically and emotionally, and educationally respond to students with special needs in your classroom? Historically, rural schools have accommodated many pupils with special needs. However, in B.C. within recent years it has been mandated that all children have the right to be educated in the regular classroom. This new era has placed an extra burden on small schools with limited resource personnel. Teachers are required to change their teaching repertoire to more adequately accommodate the whole range of learner needs. The multi-aged family grouping of rural schools may assist in the change process.

> Processes of change in the form of restructuring, reculturing, collaborating and the like are extremely important things that professionals and policy makers need to understand and address. But attention to the change process should never be allowed to detract from or displace the paramount importance of change purpose and change substance - of what the change process is for! (Hargreaves, 1994, p.260).

Rural teachers have acknowledged "change" as a means of promoting successful inclusion for children with special needs. The important task now will be to "identify, assess and portray a range of restructuring models to create menus of choice for educators to adapt in their own settings, rather than mandates of imposition with which they must comply, whatever their circumstances" (Hargreaves, 1994, p. 261).

For the purposes of this paper, discussion and recommendation are organized by the overall objectives of the study with recommendations outlined where applicable.

Question one: How do B.C. teachers, in rural schools, define students with special needs?

The rural teachers' responses suggest that they are faced with a large diversity of special needs in their classrooms. According to the respondents, positive productive inclusion is more likely to occur if: (1) there is administrative and personnel support and (2) all the children in the classrooms are permitted and not prevented from learning as a result of the inclusionary practices.

Question two: What training have rural teachers received at both the preservice and inservice level to prepare them to teach students with special needs?

This question brought to light that the respondents believed that neither preservice nor inservice experiences introduced them to materials and activities appropriate to educating children with special needs. Both the BCTF and Cross & Frankcombe (1994) are presently compiling resource materials and activities for teachers to use with special needs students. A focus for future district inservice could possibly be access to some of these materials.

Furthermore, when contemplating the issues of preservice and inservice education for rural teachers the characteristics of the teachers who work in the rural environment should be considered. Bandy & Gleadow (1980) found that teachers who came from a rural background were more inclined to teach in rural schools of British Columbia and to meet the needs of rural children and the community. Similarly, Storey (1992) found that 51.2% of the rural teachers came from a rural background. In 1977, Sher noted that "the best rural teachers are the ones who are able to cope with sparcity, utilize community resources, invent curricular materials, and, above all, are oriented to teaching children rather than subjects" (p 287). Thus one preservice/inservice option might be to identify and assist those who are less accustomed to the rural milieu.

Question three: How do teachers in rural B.C. perceive their effectiveness when integrating students with special needs?

There was a strong correlation between teacher success in meeting the needs of the students and their own level of job satisfaction. Hargreaves (1994) recommends a 'moving mosaic' with "blurred boundaries, overlapping categories and membership, and flexible, dynamic [and] responsive planning" (p. 238). Teacher generated team planning and team teaching within rural schools, across

grades, across districts may provide teachers with the flexibility, risk-taking and continuous improvement which are an essential part of a fulfilling professional life.

Question four: Do gender, grade level, or size of community make a difference to the level of satisfaction that teachers experience in their integration of special needs students?

According to the responses to this question primary teachers claimed a higher level of satisfaction with their ability to effectively integrate students with special needs into their classes than did teachers at other grade levels. The question which arises from these comments is how to make the experience of integrating children in the lower and upper intermediate grades more satisfying for teachers. Sharing of strategies across grade levels might stimulate open discussion and free teachers from entrenched patterns of behaviour when dealing with older students with special needs. Perhaps the proliferation of monographs on special 'tips and methods' (Hill, 1993) can be shared across grades. The 'tips' could possibly stimulate positive results with students and positive attitudes among staff members. Collegiality among rural teachers and rural communities can encourage debate, discussion, and development within and among many school districts.

Question five: What support is available to assist the classroom teacher when integrating special needs students into their rural school?

The responses to this question highlighted the low percentage of parent and community volunteers in the classroom. Strategies for promoting, utilizing, and capitalizing on the varied knowledge and wisdom of community members can come in the form of varied innovations such as the active perpetuation of the Community school philosophy.

Question six: How do rural teachers assess the progress of special needs students in the regular classroom?

Assessment and monitoring of pupil progress were part of the rural teachers' daily routine. However, teachers perceived an isolation from other professionals who could assist them with the identification and assessment of special needs pupils. To overcome this feeling of isolation is a challenge for all rural school districts. Distance and inaccessibility have long been the norm in British Columbia rural schools. With the advent of modern technology, it should be possible to implement some innovative networking.

Question seven: Which resources and personnel have assisted the teachers the most with the inclusion of special needs students?

The respondents perceived that other teachers and other professionals had helped them the most with their inclusionary practices. The data from this question reveal important considerations for inservice programs. The model of peer coaching appears to be a viable alternative for rural teachers. Teachers helping teachers is the basis of Goodlad's *A Place Called School*. It has long been recognized that mentorship is highly successful for not only increasing knowledge but also for implementation of new teaching strategies (Showers, 1988). One aspect that was surprising, given the usual close relationship of rural schools and their communities, was the lack of perceived community involvement with the successful integration of special needs students. This is perhaps another resource that should be addressed by inservice programs.

Question eight: What teaching strategies do teachers find the most effective for integrating special needs students?

The response to this question is a celebration of the knowledge, wisdom, and credibility of professionals in the rural schools of British Columbia. Teachers are using stellar teaching strategies when integrating pupils with special needs into their classrooms. McTaggart (1989) indicates that stellar accomplishments must be recognized if we are to support rather than undermine the confidence of teachers in B.C.

Question nine: What recommendations could be made to rural school districts, the Ministry of Education, and Universities regarding the integration of students with special needs in rural schools?

Perhaps the most important role for school districts, Ministry of Education and Universities is the dissemination of resource materials and the inauguration of a networking system within the rural community.

CONCLUSION

This study provides some glimpses into the world of rural teachers as they struggle with the inclusion of all children into their classrooms. The diversity of the situations and the dedication of the teachers are strengths in B.C.'s rural educational scene. The present stable teacher population provides an excellent opportunity for school districts to implement long range programs to assist teachers with their students.

This study singularly discusses rural teachers' experiences making no comparisons with urban teachers. Future research should be directed at a broader segment of the teaching profession. However, given the unique, adaptable nature of the small rural schools and their dedicated teachers, it may be that these teachers are ideally situated to contribute to the overall knowledge about successful integration of children with special needs.

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